

FIG. 1

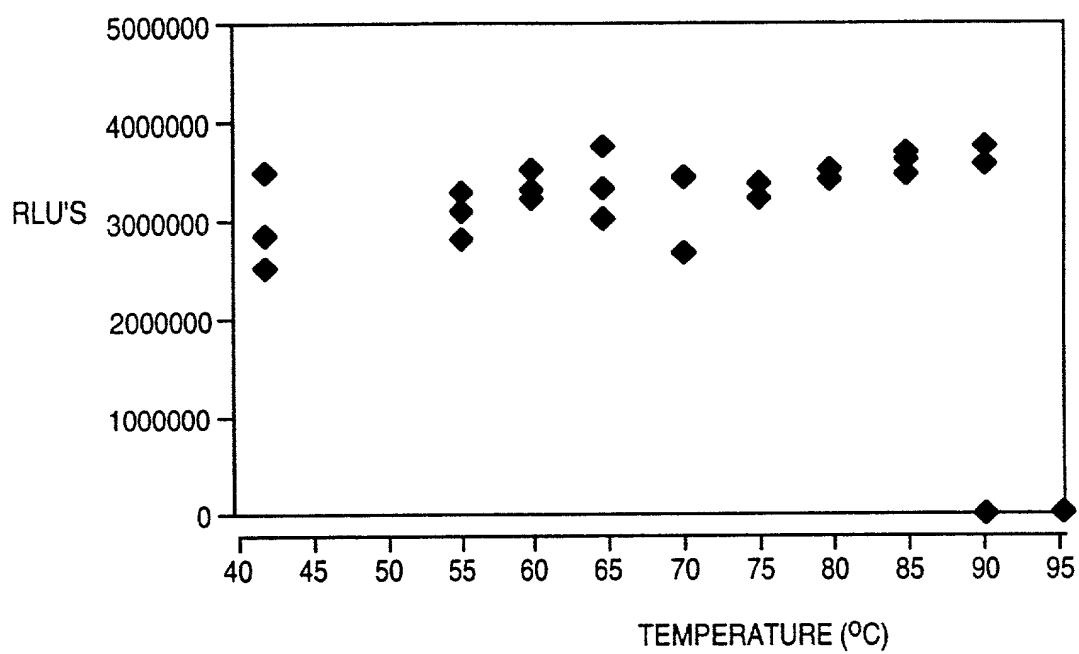
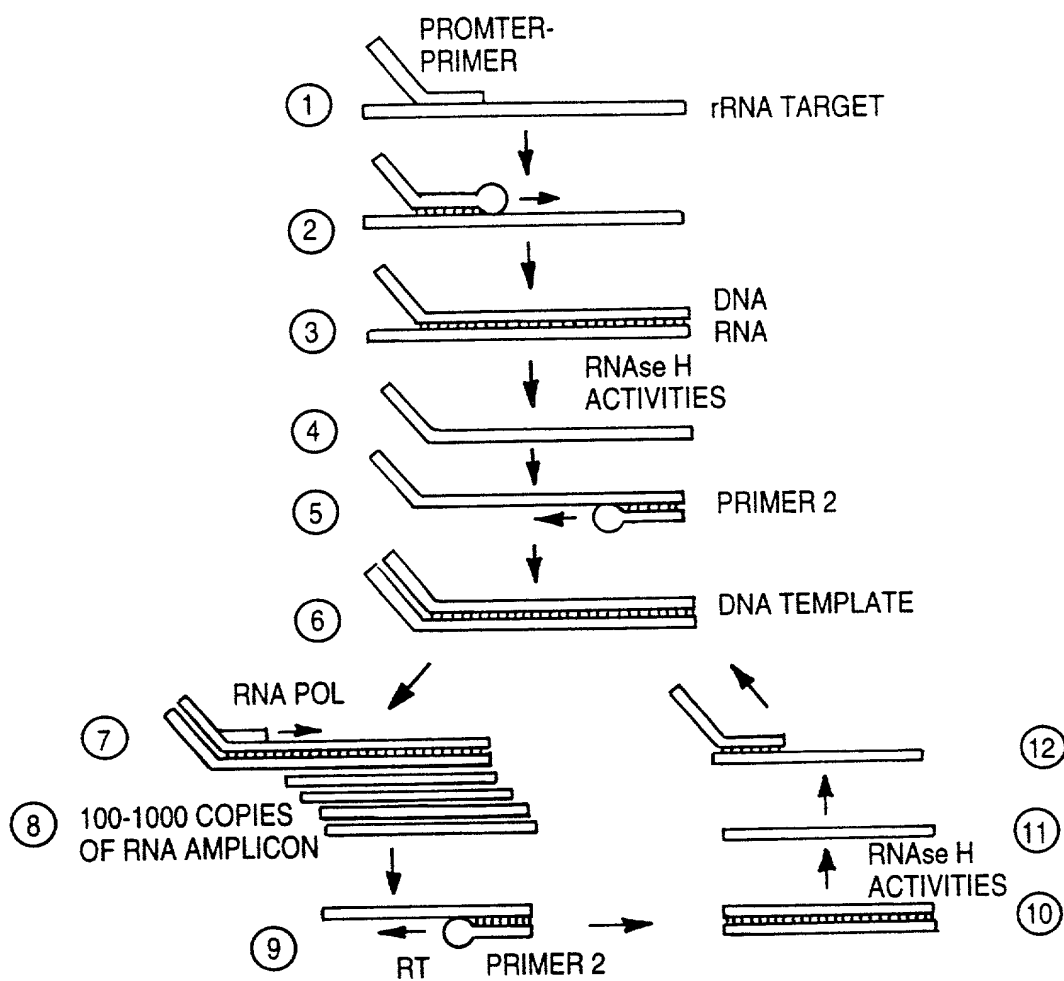


FIG. 2



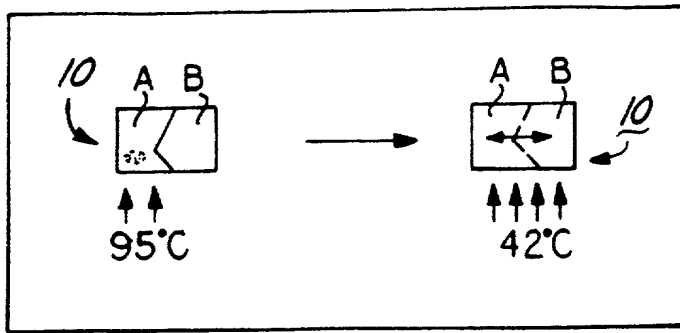


FIG. 3A

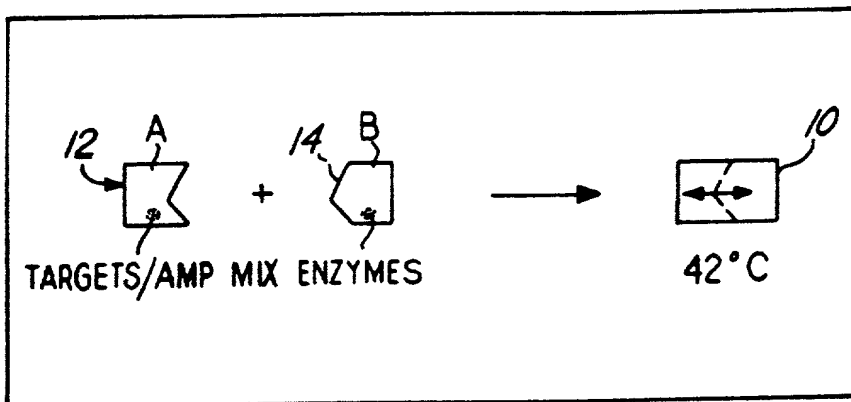


FIG. 3B

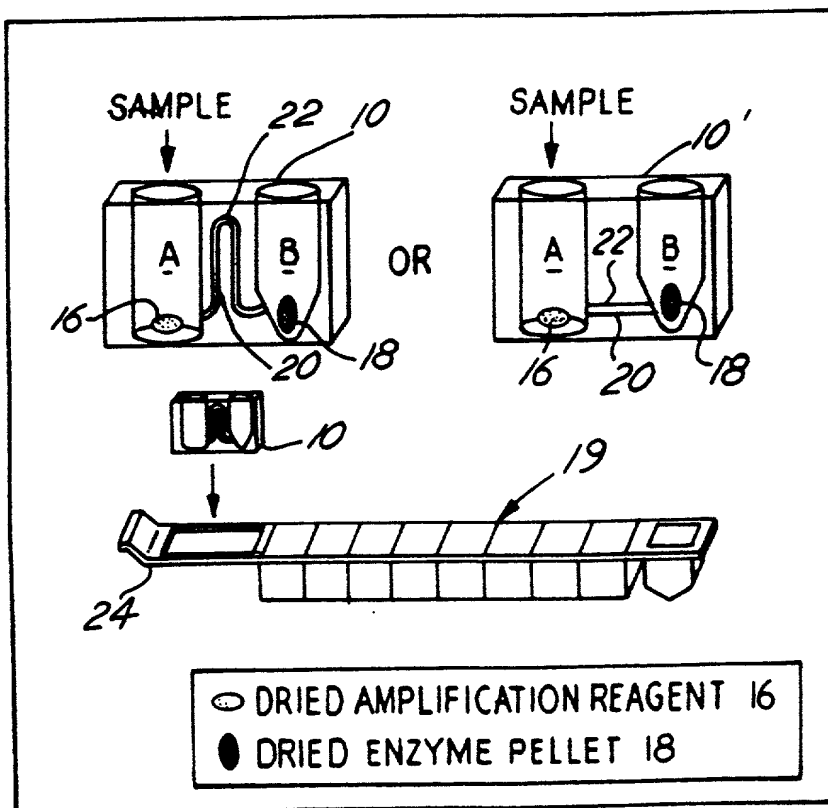
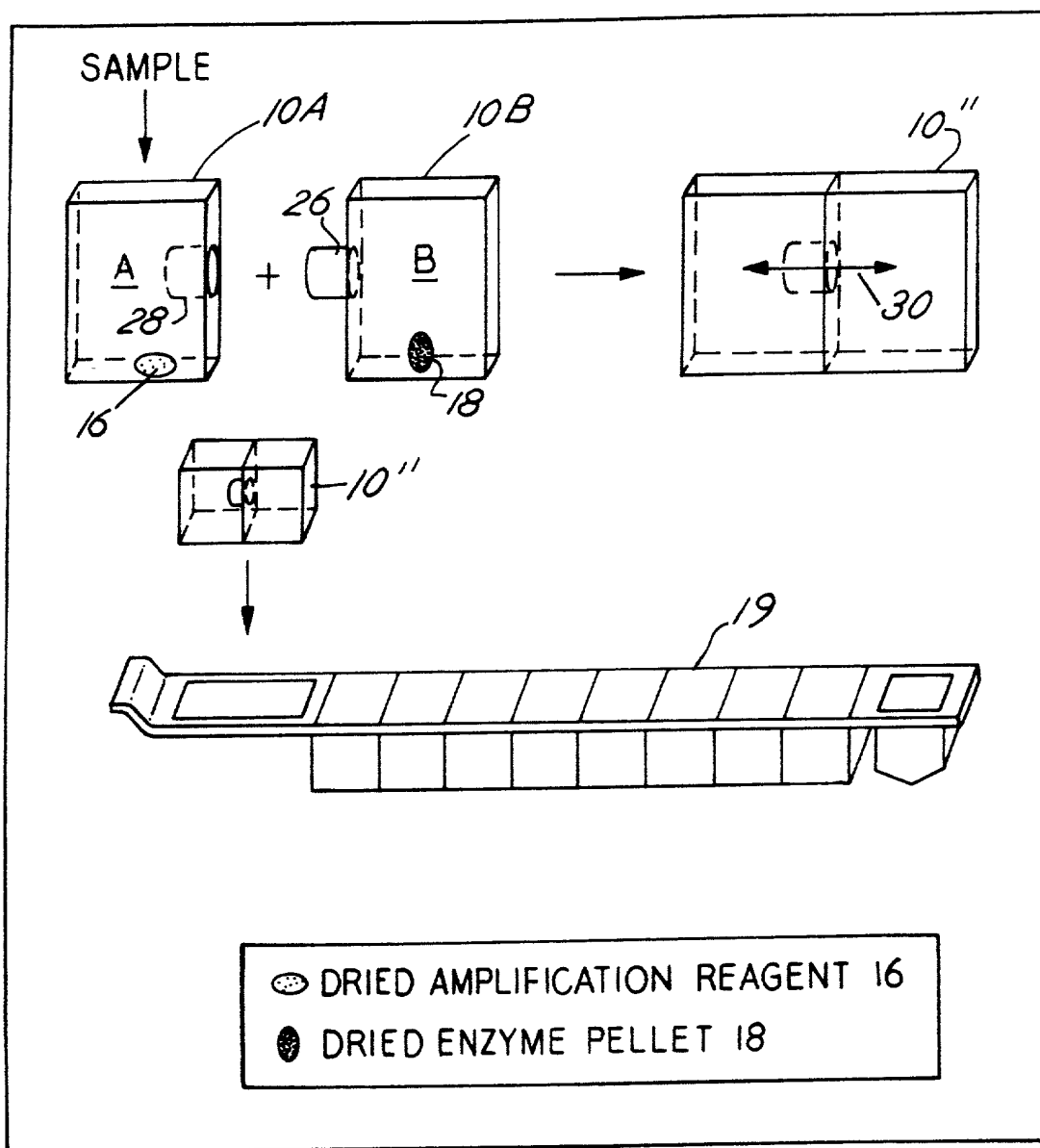


FIG. 3C

FIG. 4



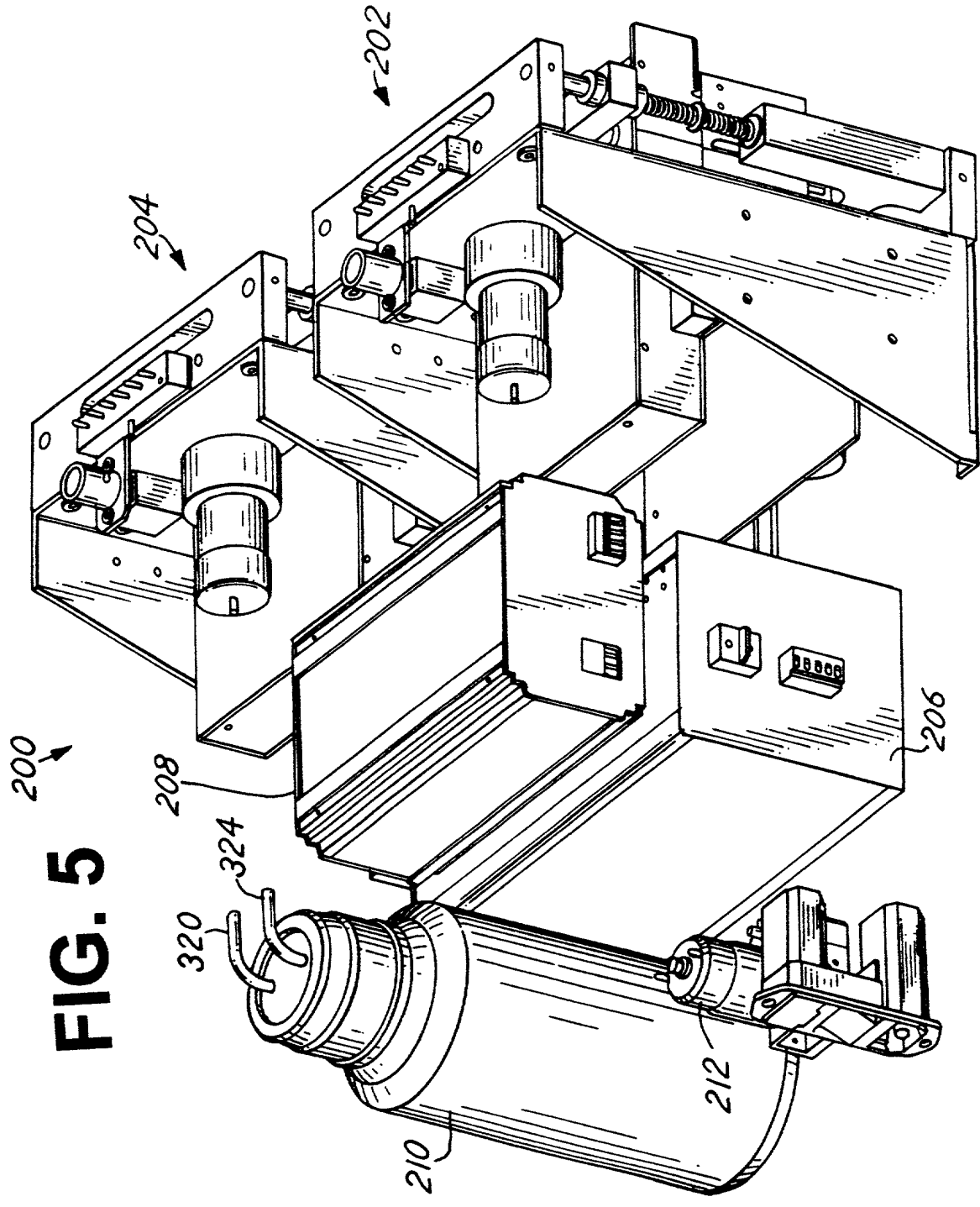
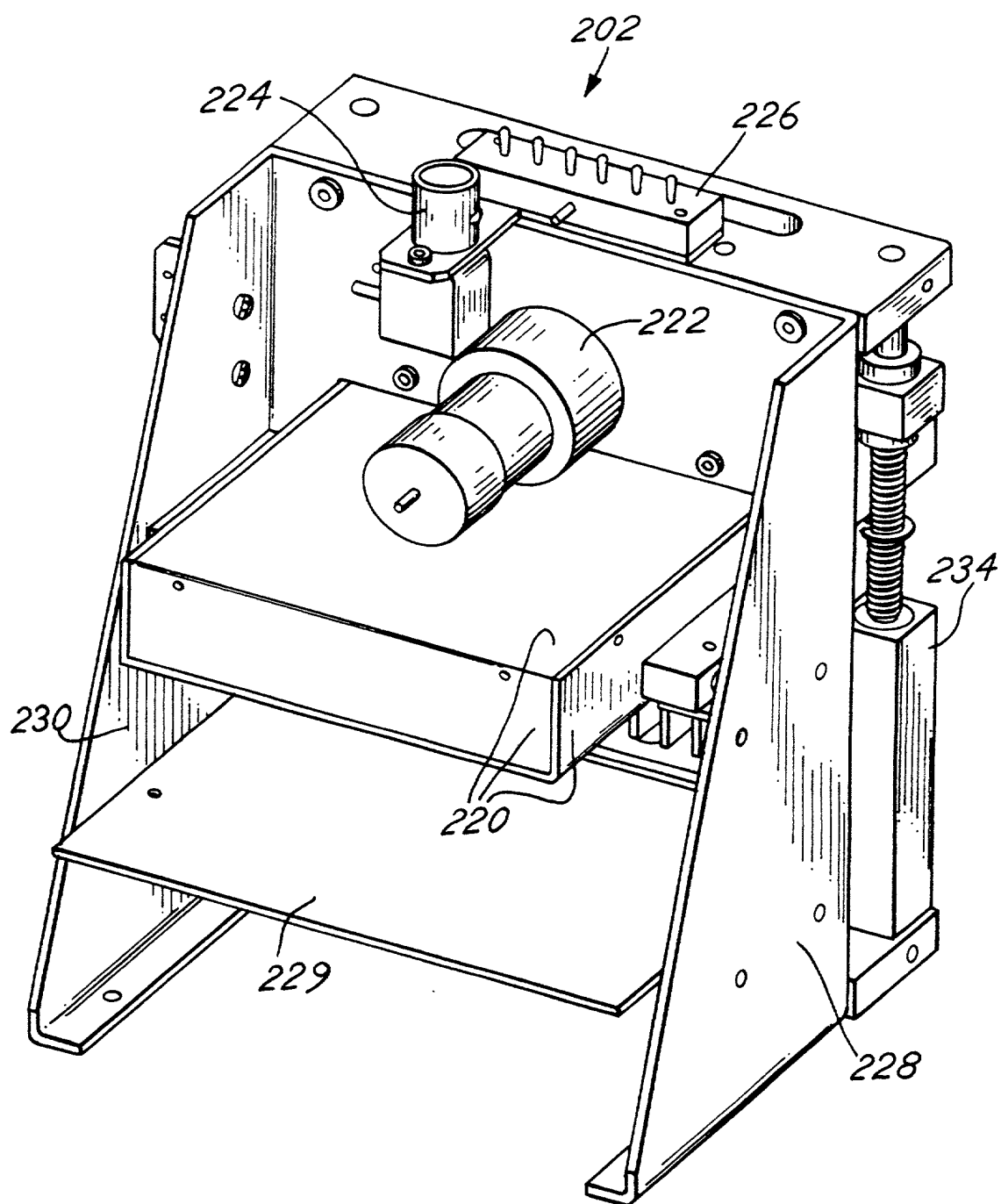


FIG. 5

FIG. 6



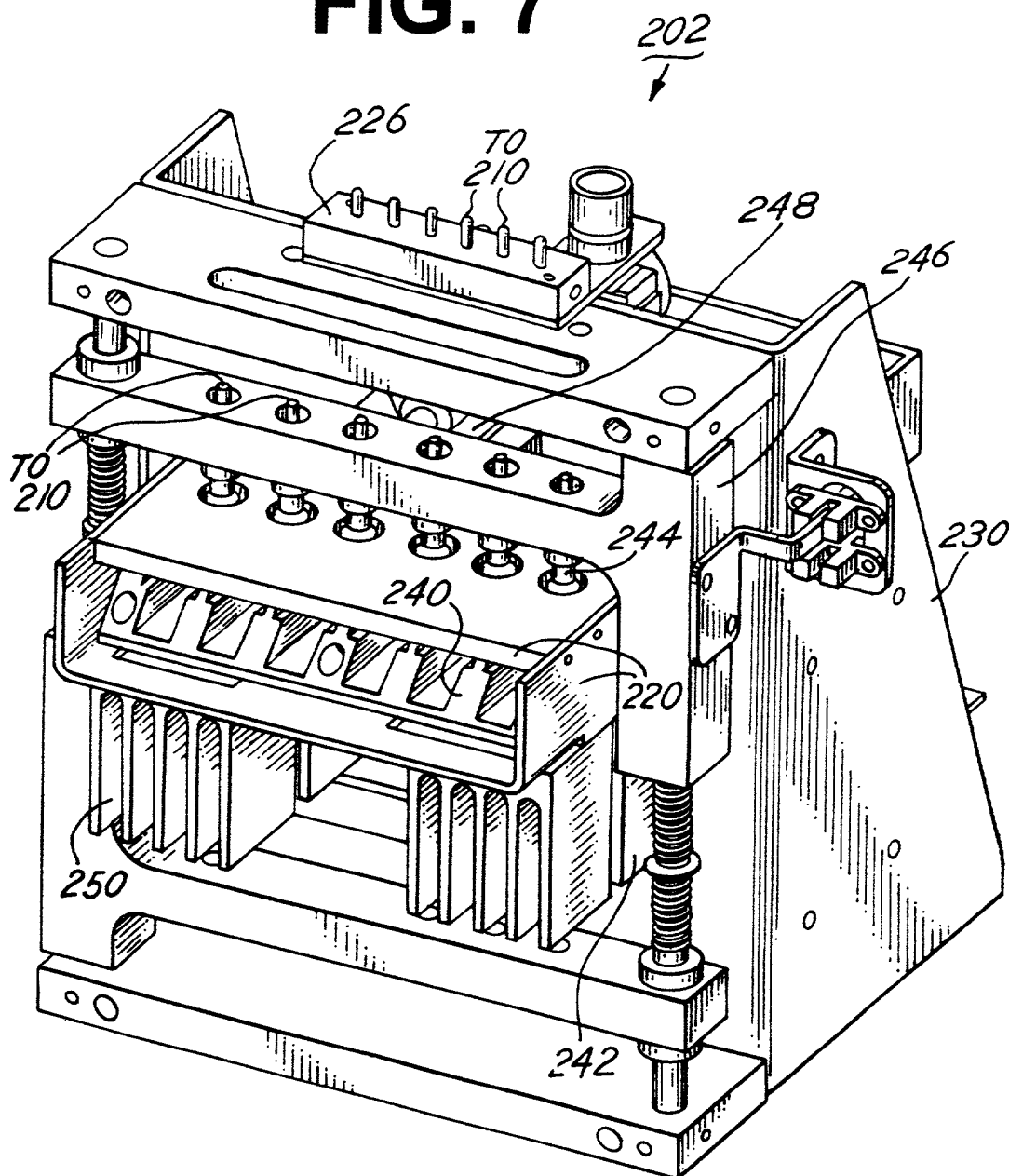
[illegible]

FIG. 8

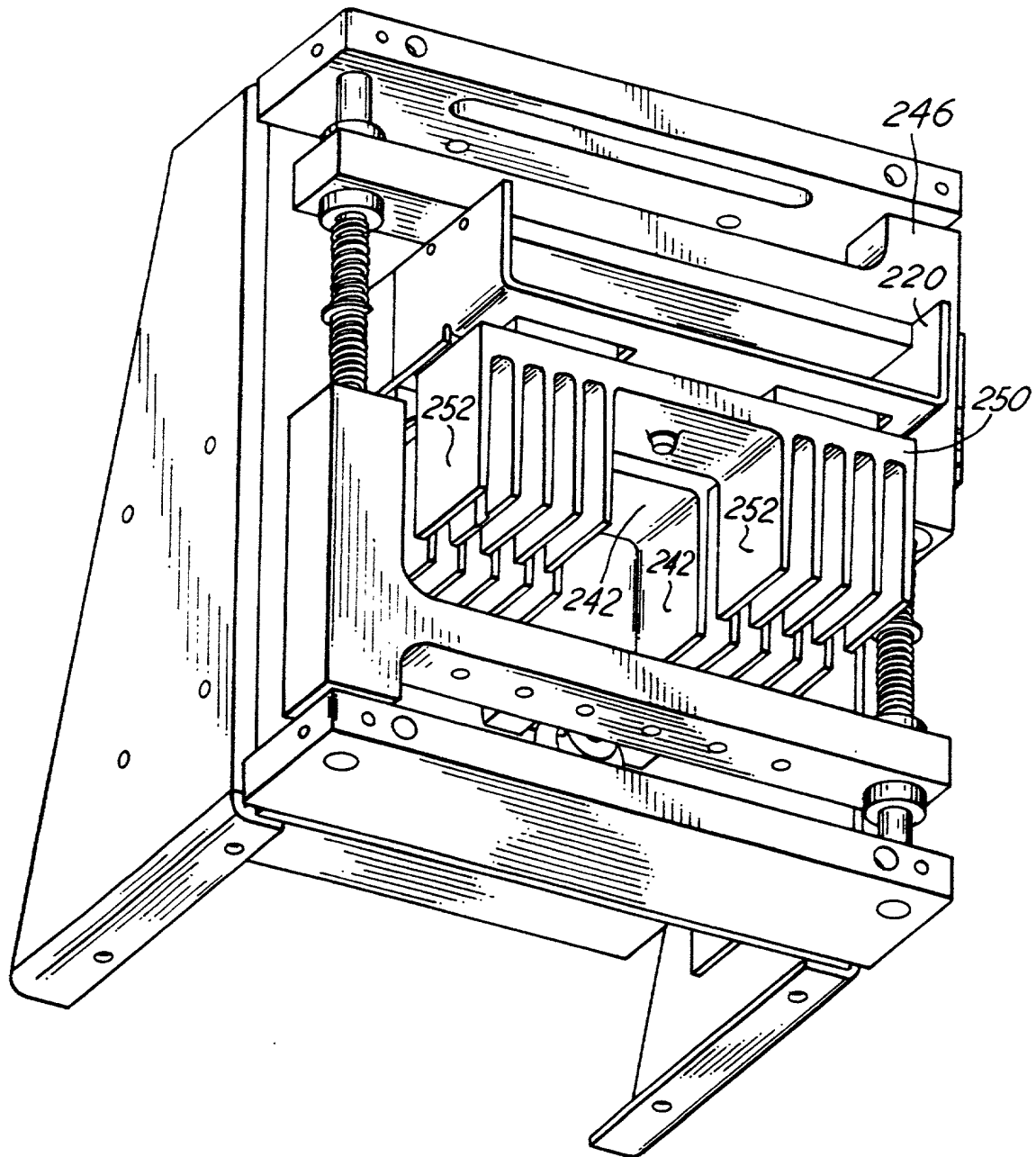


FIG. 9

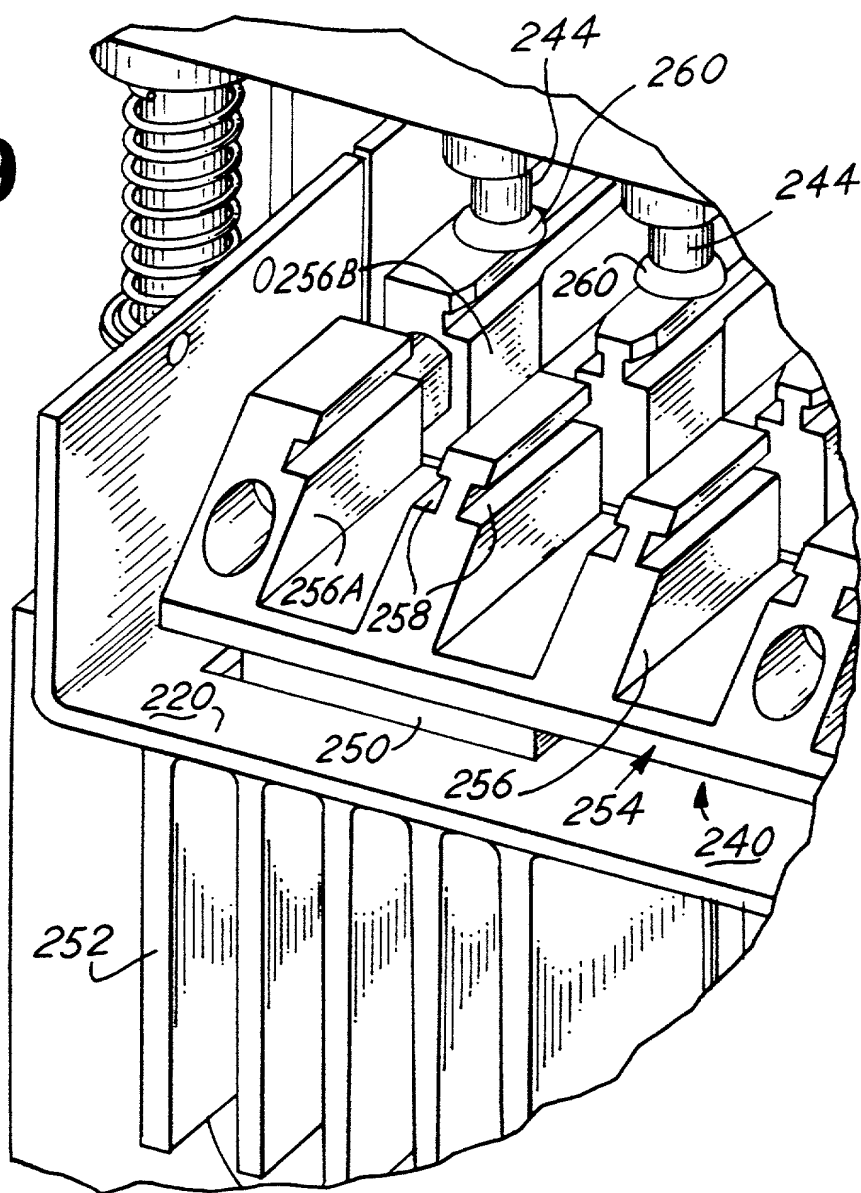


FIG. 10

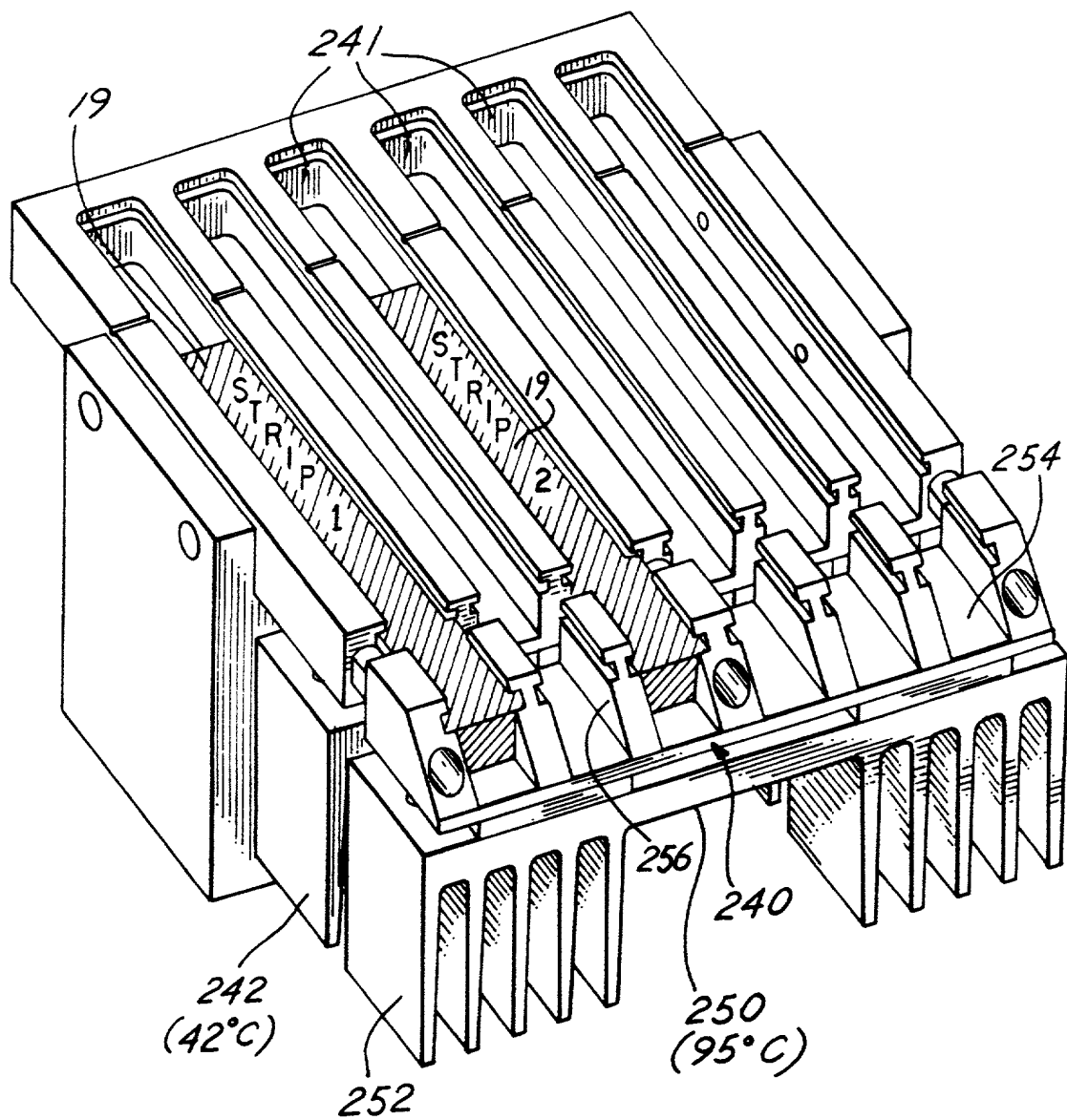


FIG. 11

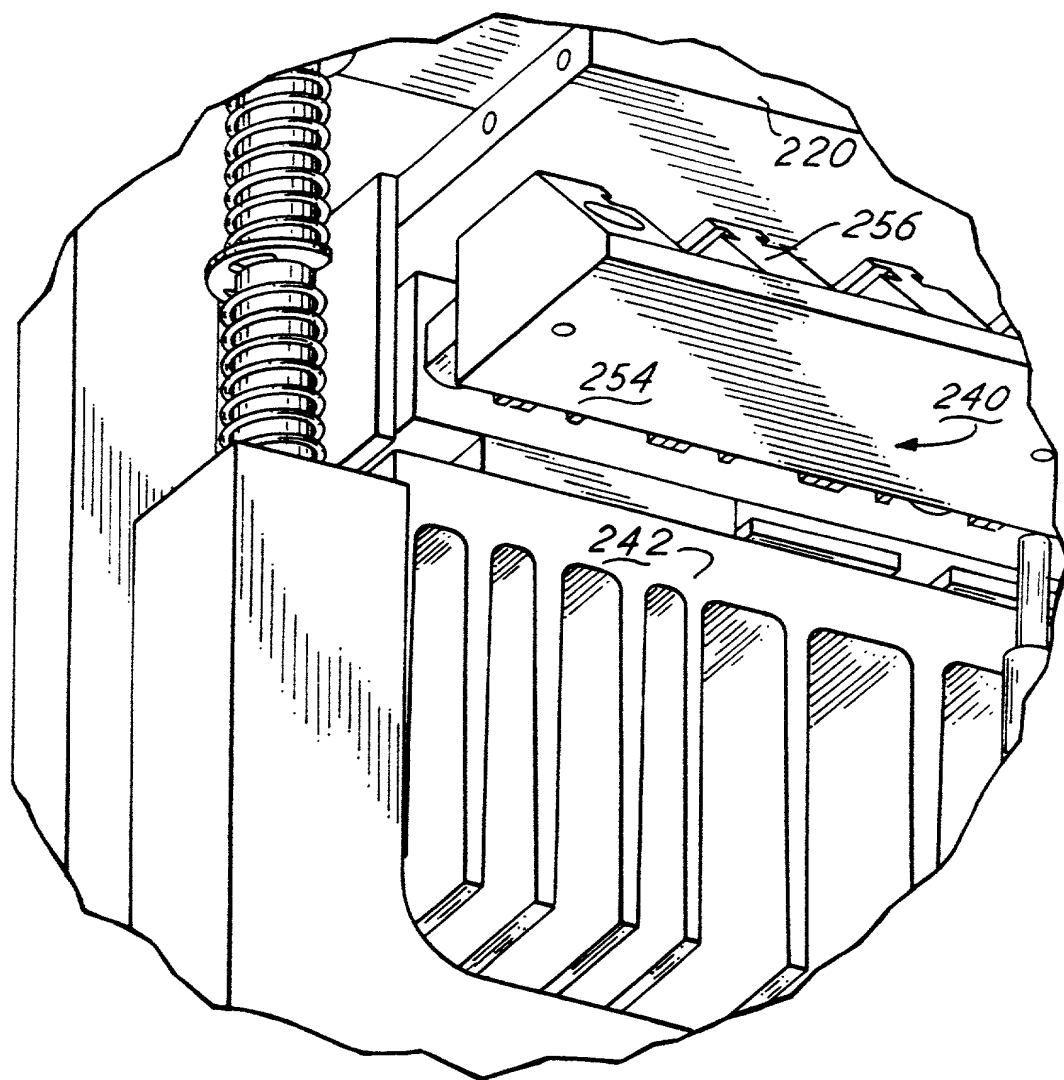
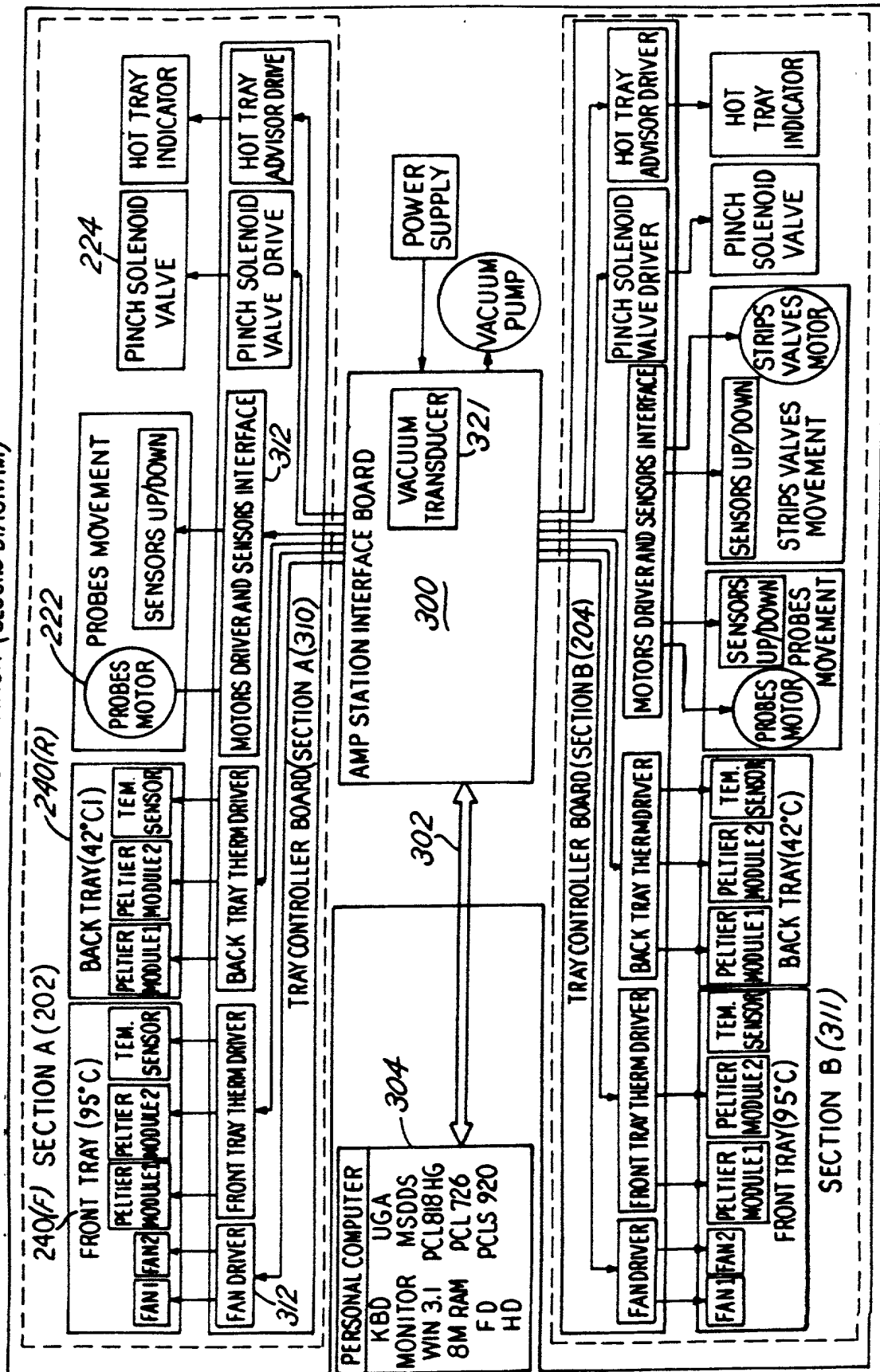


FIG. 12

AMPLIFICATION STATION (BLOCKS DIAGRAM)



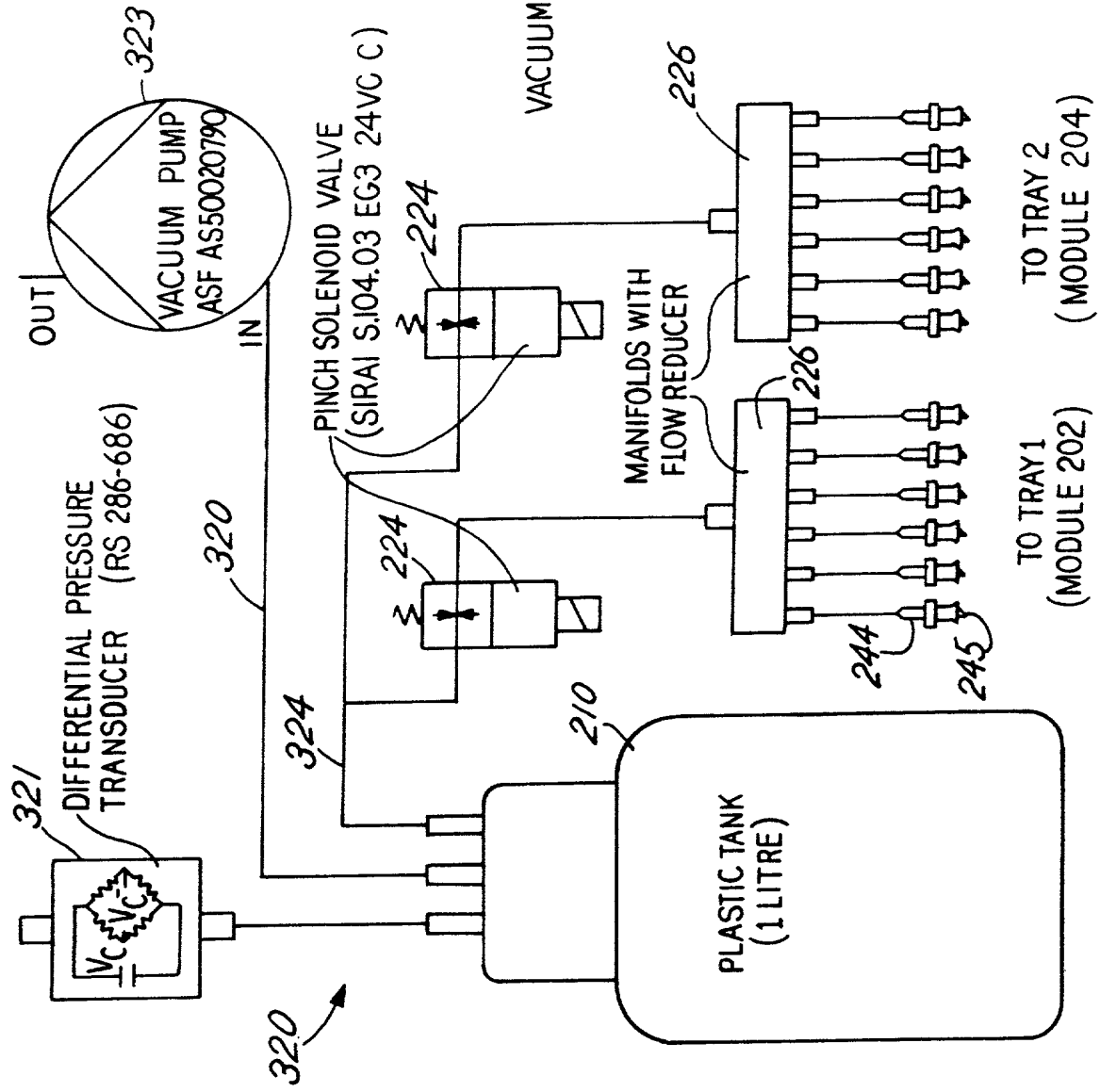
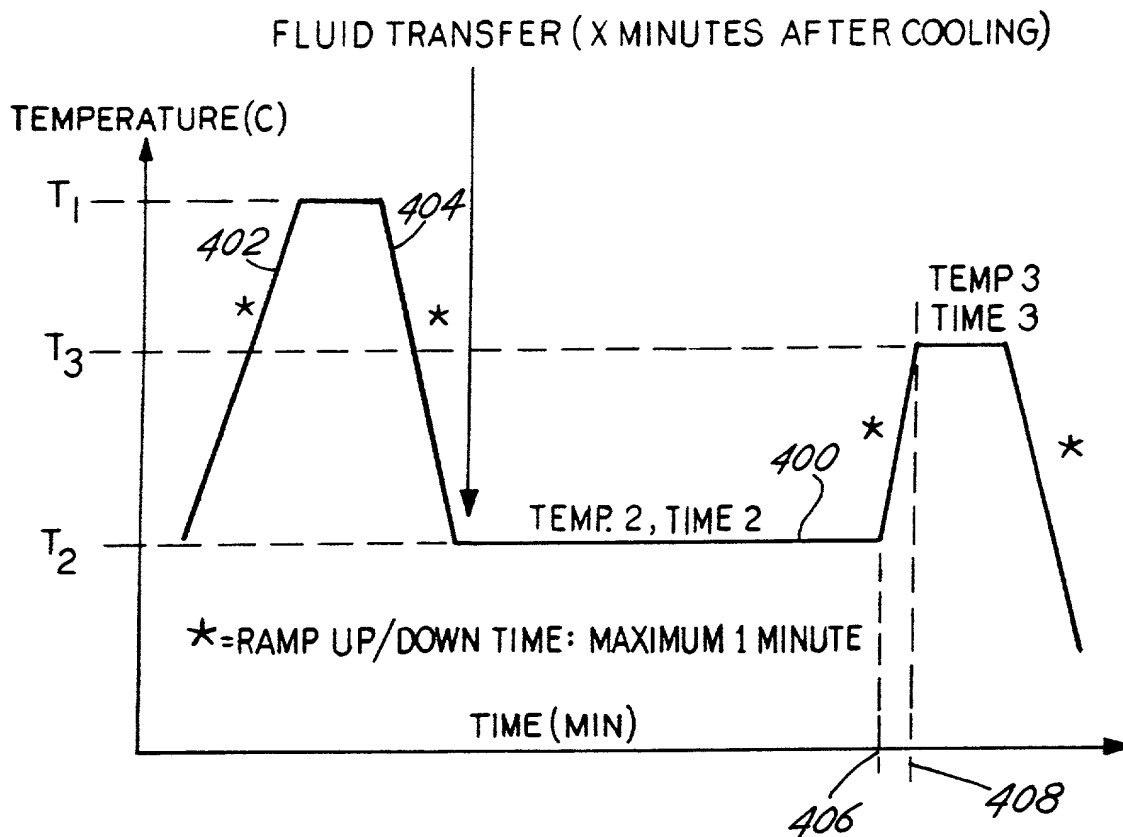


FIG. 13
VACUUM SYSTEM DIAGRAM

FIG. 14



SPR PRODUCTION WITH DISTINCT CAPTURE ZONES

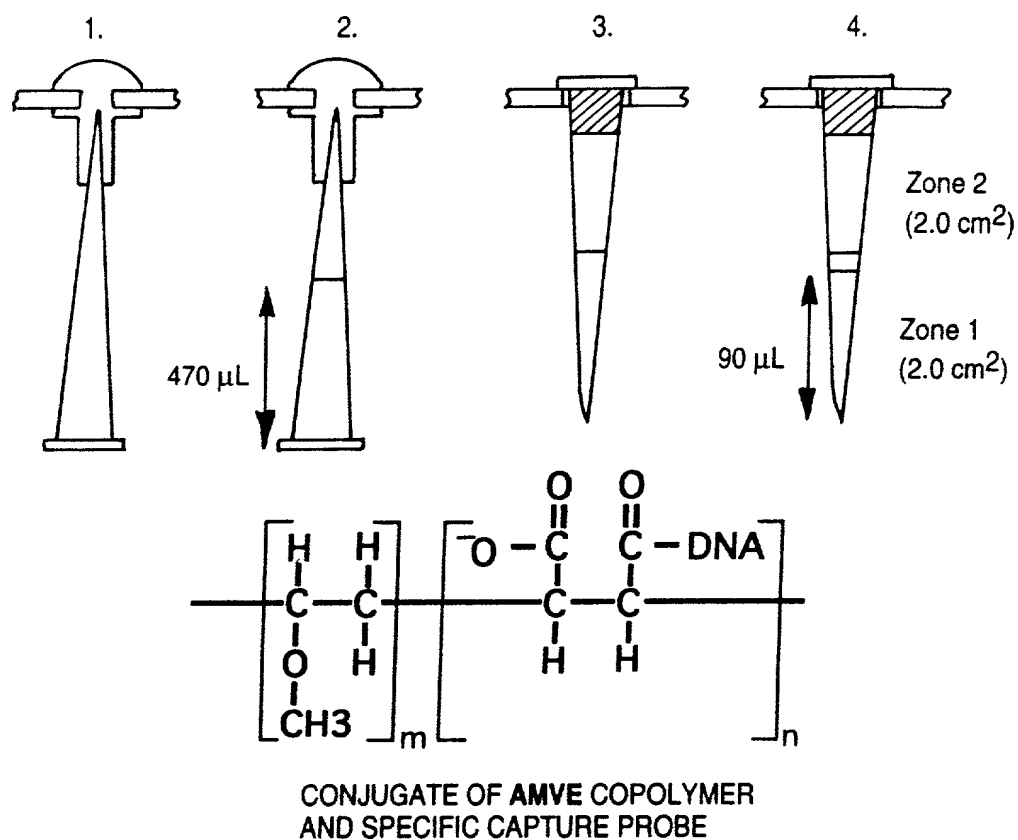


FIG. 16

MULTIPLEX STRIP CONFIGURATION

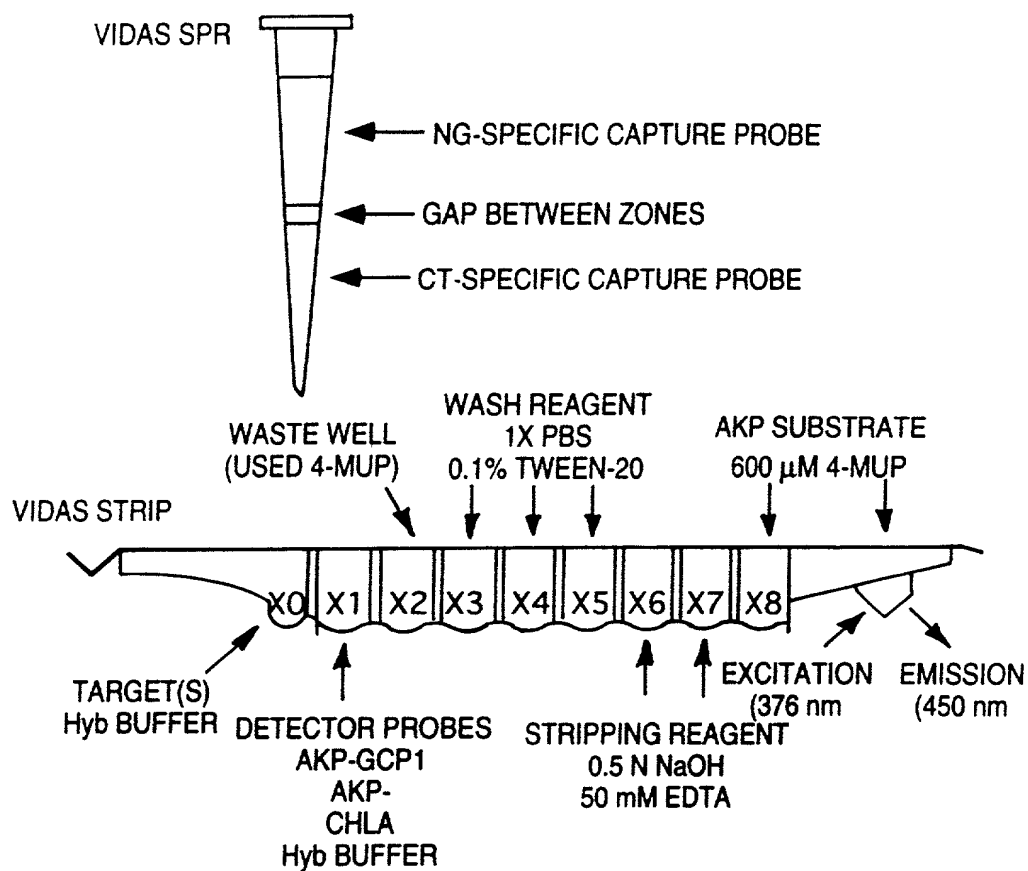


FIG. 17

TEST OF MULTIPLEX VIDAS PROTOCOL

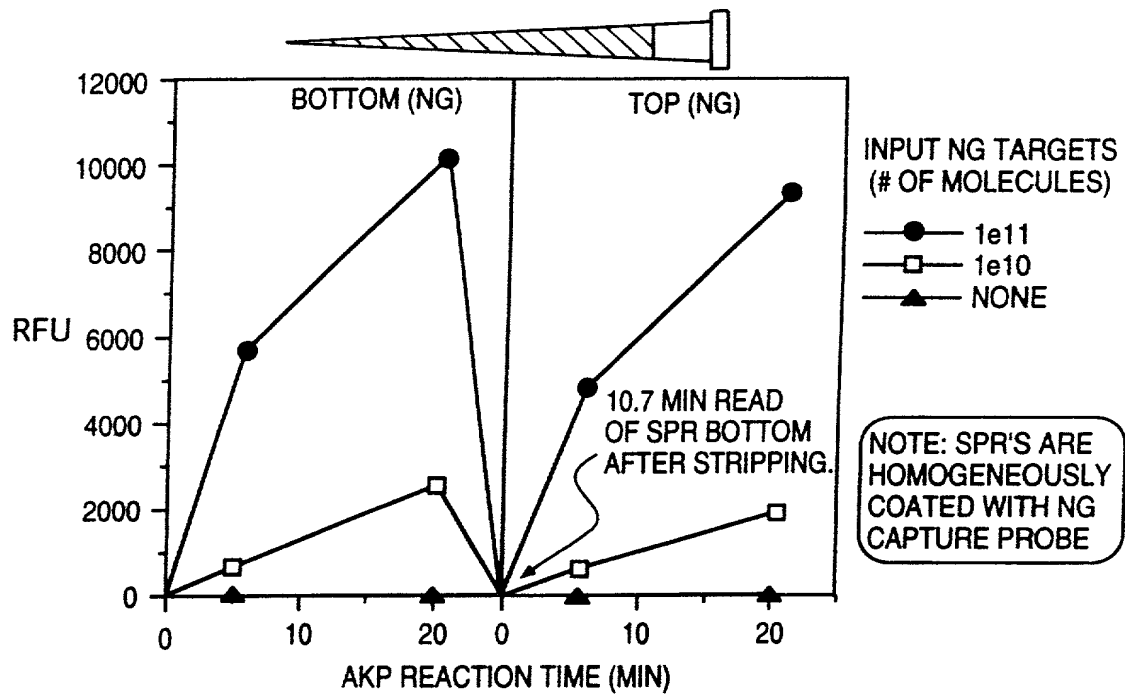


FIG. 18

FIG. 19A

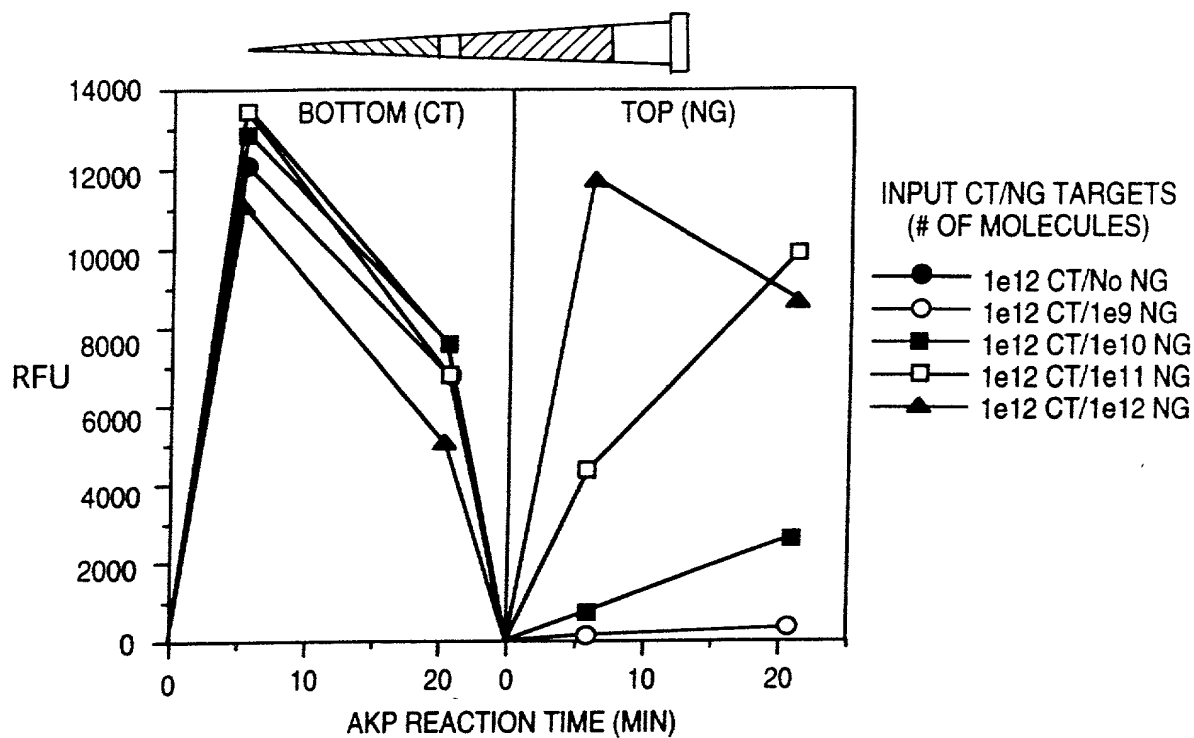


FIG. 19B

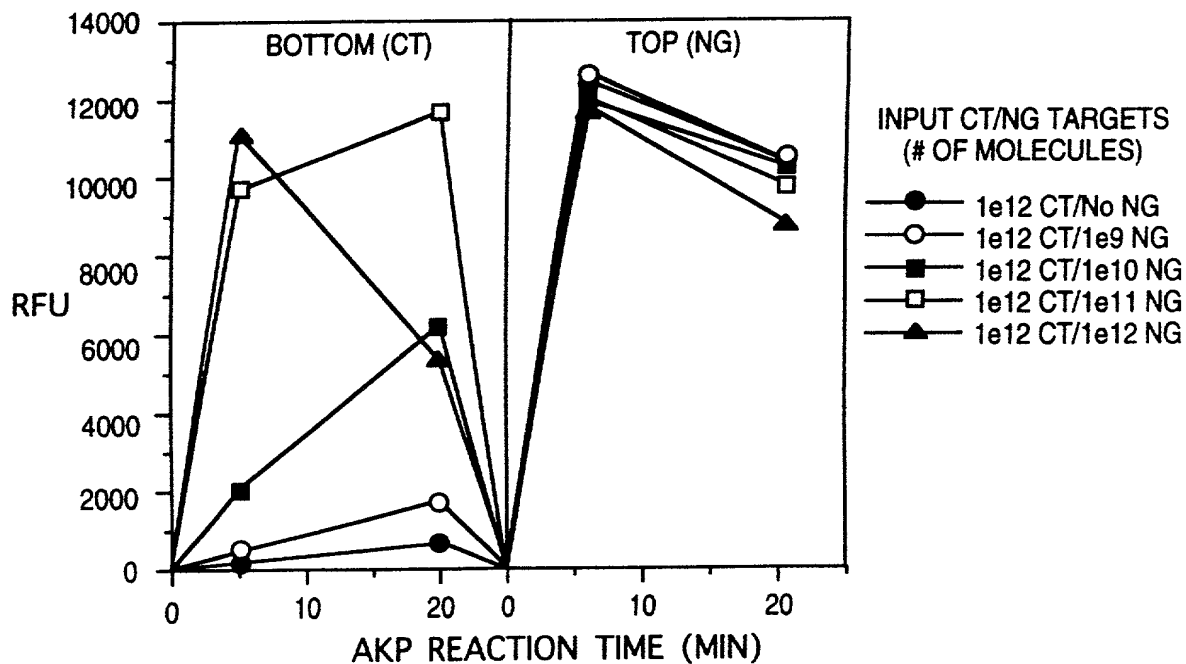


FIG. 20A

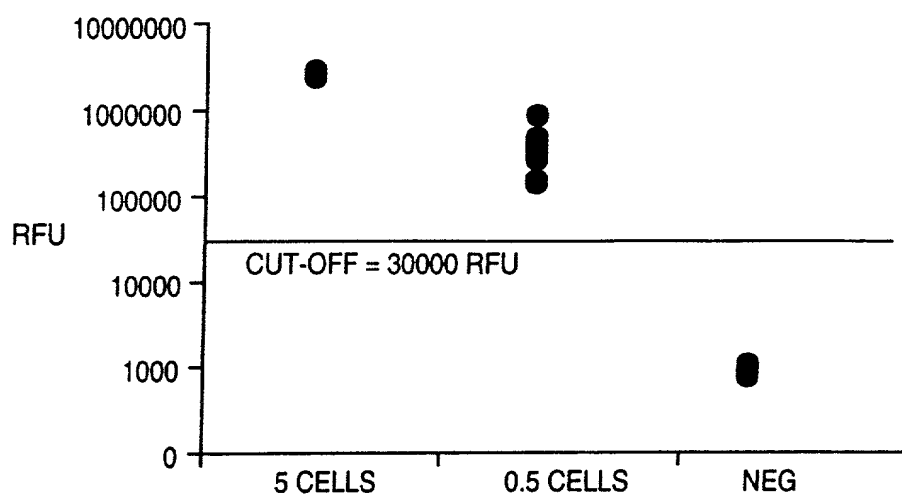


FIG. 20B

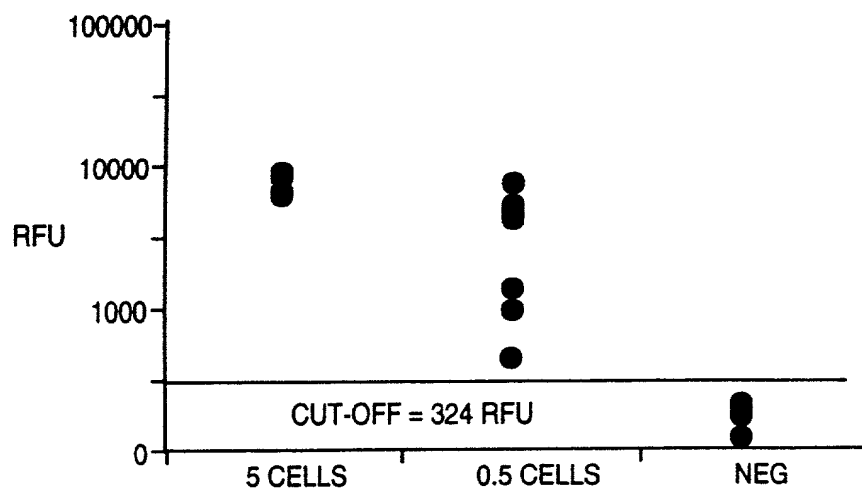
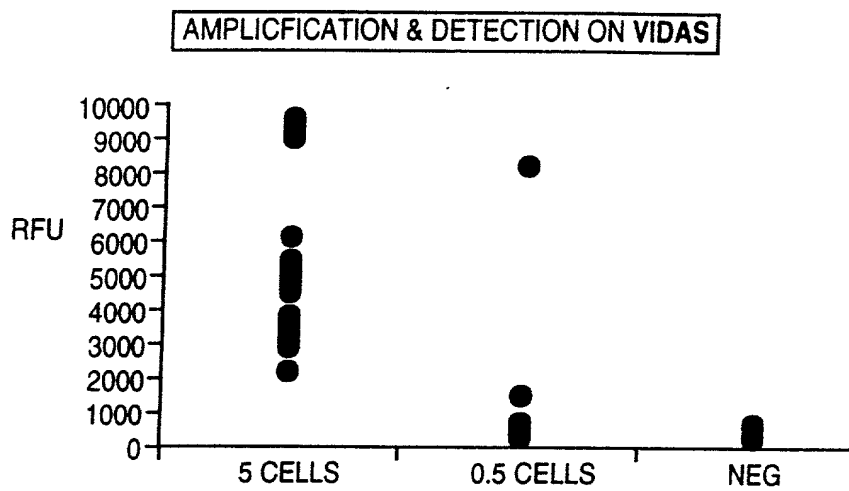


FIG. 21



BINARY: VIDAS DETECTION

BINARY: AMPLIFICATION AND DETECTION
ON 44oC VIDAS

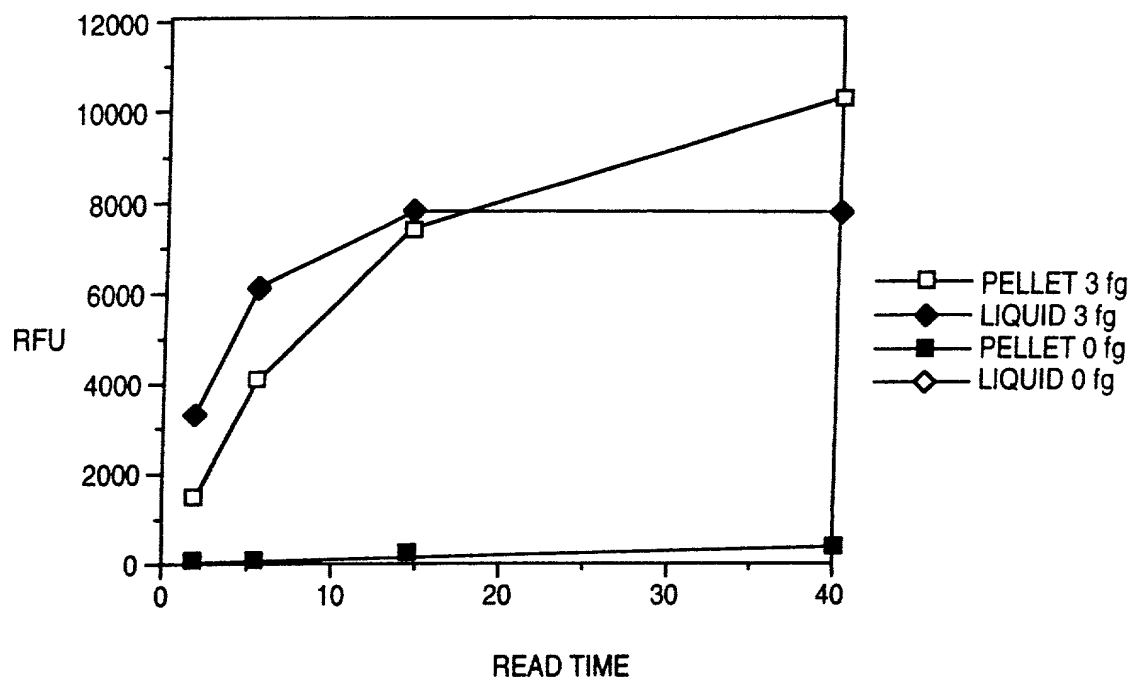


FIG. 22

Random Internal Control 1

5'-gggAgCgAATgTTAgggCACACTCATg9g9TgAgCAAGTCITTTCTgTAAG9g9CTgATgTCAGg9CTATTTgACAAgCATgACgACCAgA-3'
 3'-cccTgCTTACAAATCCCgTgTgAgTACCCACTCgTTTCAGAAAgACATTTCCCGACTACAGTCCgCATAAACTgTTTCgTACTgCTg9TCT-5'

RAN16 primer: 5'-AgCgAATgTTAgggCACACTC-3' 5'-TAAG9g9CTgATgTCAGg9CTA-3' RAN21 AMVE-probe
 TARGET: 5'-gggAgCgAATgTTAgggCACACTCATg9g9TgAgCAAGTCITTTCTgTAAG9g9CTgATgTCAGg9CTATTTgACAAgCATgACgACCAgA-3'
 RAN33 AKP-probe: 5'-ATg9g9TgAgCAAGTCITTTCTg-3' 3'-AACTgTTCTgTACTgCTg9TCT

AgAg9g9ATATTCACCTCAGCATATTTAA-5'
 (T7 promoter / RAN19 primer)

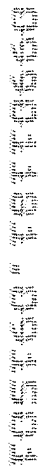
(T3 promoter)

5'-GCAATTACCCCTCACTAAAGGGAgCgAATgTTA9g9CACACTCATg9g9TgAgCAAGTC-3'
 3'-GTACCCACTCgTTTCAGAAAgACATTTCCCGACTACAGTCCgCATAAACTgTTCTgTACTgCTg9TCT-5'

OLIGOS

RAN16 TMA primer: 5'-AgC gAA TgT TAG g9C ACA CTC-3'
 RAN21 AMVE-probe: 5'-aminolink-TAA g9g CTg ATg TCA g9C gTA-3'
 RAN33 AKP-probe: 5'-aminolink-ATg g9T gAg CAA gTC TTT CTg-3'
 T7/RAN19 TMA primer: 5'-AAT TTA ATA CgA CTC ACT ATA g9g AgA TCT g9T CgT CAT gCT TgT CAA-3'
 RIC1 Detection oligo: 5'-CAA TAC gCC TgA CAT CAg CCC TTA CAg AAA gAC TTg CTC ACC CAT gAg-3'
 RIC1 top oligo: 5'-GCA ATT AAC CCT CAC TAA AGG GAg CgA ATg TTA g9g CAC ACT CAT g9g TgA gCA AgT C-3'
 RIC1 bottom oligo: 5'-TCT g9T CgT CAT gCT TgT CAA TAC gCC TgA CAT CAg CCC TTA CAg AAA gAC TTg CTC ACC CAT g-3'

FIG. 24

[illegible][illegible]

Random Internal Control 2

5'-CAGTAGAGGTAGGGCTGTAGGATTAACAGAGCCAGTGTACGGAACGACTCAGCACGGCGAATACTTTTGTACCAGACCTAGAGGAGTGCgt-3'
 3'-GTGATCTGCATGCCCGACGATCCTCATATTGTCTTCGGTCAATATGCTTGTGAGTCGTGCCGCTTATGAAACGATGGTCTGTgATCTCCTCAGCA-5'

RAN51 TMA primer 5'-CAGTAGAGGTAGGGCTGTAGGAGT-3'

5'-ACGACTCAGCACGGCGAATAC-3' RAN32 AKP-probe

TARGET -----> 5'-CAGTAGAGGTAGGGCTGTAGGAGTATTAACAGAGCCAGTGTACGGAACGACTCAGCACGGCGAATACTTTTGTACCAGACCTAGAGGAGTGCgt-3'

RAN27 AMVE-probe 5'-TAACAGAGCCAGTGTACGGA-3'

3'-ACGATgTCTgATCTCCTCAGCA

AgAGggATATCACTCAGCATTAATTTAA-5'
 (T7 promoter / RAN39 primer)

(T3 promoter)

5'-GCATTAACCTCAGTAAAGGCAGTAGAGGTAGGGCTGTAGGAGTATTAACAGAGCCAGTGTAC-3'

3'-GTCTTCGGTCAATgCCTTgCTgAGTCTgTgCCgCTTATgAAACgATgTCTgATCTCCTCAGCA-

OLIGOS

RAN51 TMA primer: 5'-CAG TAG AGG TAG ggg CTg CTA gga gT-3'

RAN27 AMVE-probe: 5'-aminolink-TAA CAG AAGACCA gTg TAC gga-3'

RAN32 AKP-probe: 5'-aminolink-ACg ACT CAG CAC ggc gAA TAC-3'

T7 / RAN39 primer: 5'-AAT TTA ATA Cga CTC ACT ATA ggg AgA ACg CAC TCC TCT Agg TCT ggt AgC A-3'

RIC2 Detection oligo: 5'-AAG TAT TCg CCg TgC TgA gTC gTT CCg TAC ACT ggc TTC Tgt TAT AC-3'

RIC2 Top oligo: 5'-GCA ATT AAC CCT CAC TAA AGG GCA gTA gAg gTA ggg gCT gCT Agg AgT ATA ACA gAA gCC AgT gTA C-3'

RIC2 Bottom oligo: 5'-ACg CAC TCC TCT Agg TCT ggt AgC AAA gTA TTC gCC gTg CTg AgT Cgt TCC gTA CAC Tgg CTT CTg-3'

FIG. 26

Detection of RIC1 DNA Oligo Targets

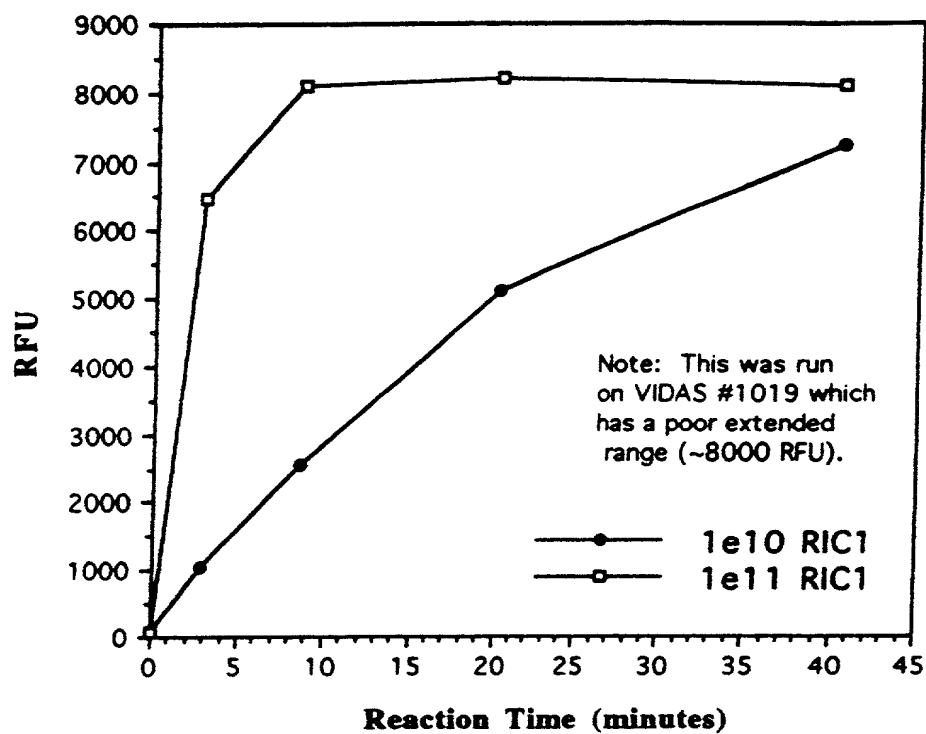


FIG. 28

AMPLIFICATION OF PURIFIED RIC1 RNA									
Position	RIC1 RNA*	CT RNA	AKP Type & SPR Type	0 min	1.8 min	5.4 min	14.6 min	40.0 min	
C1	none	none	RIC1	56	56	58	61	70	
C2	"	none	RIC1	57	55	57	59	66	
C3	0.1	none	RIC1	56	55	57	61	70	
C4	"	none	RIC1	57	56	57	61	68	
C5	1	none	RIC1	56	55	59	65	81	
C6	"	none	RIC1	56	55	57	62	74	
D1	10	none	RIC1	55	78	114	202	414	
D2	"	none	RIC1	56	56	59	66	82	
D3	100	none	RIC1	56	55	58	62	73	
D4	"	none	RIC1	57	57	61	70	94	
D5	1000	none	RIC1	56	58	81	119	227	
D6	"	none	RIC1	56	57	70	102	184	
E1	10000	none	RIC1	56	93	209	414	948	
E2	"	none	RIC1	56	105	246	497	1155	
E3	100000	none	RIC1	56	395	1474	3029	6510	
E4	"	none	RIC1	56	596	1981	4309	7830	
E5	1000000	none	RIC1	56	985	3597	7371	10840	
E6	"	none	RIC1	55	1062	3617	7464	10839	
Amplification performed with CT reagents, spiked with RIC1 primers (25 pmol RAN 16 and 5 pmol T7/RAN 19)									
Each sample is an independent amplification.									
RIC1 SPRs coated at 0.5 ng/ μ l instead of the "normal" 1.0 ng/ μ l level.									

FIG. 29

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1

1

999099AAGUCUUUG---

999UgAgCAgUCUUUCUG---

U999U9A9CA9UCUUUCU9UAA999CU9AU9UCA99CUA---

U999U9A9CA9UCUUUCU9UAA999CU9AU9UCA99CUA---

1	2
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2

Random Sequence Probe #1081 (Capture)